

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH COMMISSIONER

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

Brendan Cox Suffolk County District Attorney's Office

September 19, 2011

Re: Comm. v.

ADA Cox.

Please find the discovery materials for the case noted above collated in the following manner:

- 1) c.v.s of the chemists
- 2) the Drug Lab Evidence Office Receipt to the Boston Police
- 3) the inventory control card
- 4) the Drug Powder Analysis Form
- 5) the gas chromatography/mass spectrometry (gc/ms) data

I was the custodial chemist responsible for the chain of custody, the weighing and the preliminary tests of this exhibit. Annie Khan operated the gc/ms for the confirmatory testing. If you need further clarification of these materials, call me directly at (617) 983-6627.

Michael Lawler

Senior Chemist

Cc: Annie Khan

## Curriculum Vitae

## Michael Lawler

### Education:

University of Virginia, Charlottesville, Va. Bachelor of Arts in English, 1975 Harvard University, Cambridge, Ma. Master of Arts in biology, 1995

## Experience:

1990-present currently Chemist III, Mass. Dept. of Public Health, Drug Lab analyst determining the identity of unknown substances and providing expert testimony in the Courts. Conduct special testing for poisons within drug exhibits. Lab Safety Officer.

2005-2008 lecturer in chemistry, Curry College, Milton, Ma.

1988-1990 New England Newborn Screening (NENS) Biochemist conducting pilot studies and validation trials of new newborn screening tests. Investigator and co-author of papers noted below. Introduced screening test for Biotinidase Deficiency. Liaison with interstate collaborators in national studies.

1983-1988 Supervised NENS urine screening lab for metabolic disorders. Conducted research in collaboration with Children's Hospital (Boston) detecting neuroblastoma, a cancer of early childhood. Conducted reference testing for rare metabolic disorders for an international audience.

1982-1983 NENS hypothyroid assay technologist with Tuft's University

1979-1981 Mass. Bay Community College, staff technologist preparing materials for the laboratory technician program, which included reagents, apparatus and maintaining stock cultures of human pathogens.

# Additional education and special training

Drug Analysis, completed six week training course by senior staff within the

Department of Public Health Drug Analysis Laboratory

National Laboratory Network Training Program course as Expert Witness

Qualified as an expert witness in the Massachusetts Courts and the U.S. District Court

Current Drug Trends - Multijurisdictional Drug Task Force Academy

CDC course in antibiotic resistance CDC course in cell culture

CDC course in public health response to bioterrorism

U.S. Army course in biologic warfare and terrorism

# Journal Publications

<u>Screening</u>, 1992, 1:34-37; Lawler, M., Frederick, S., Rodriguez-Anza, S., Wolf, B., Levy, H., Newborn Screening for Biotinidase Deficiency, Pilot Study and Follow-up of Identified Cases

<u>Genetic Screening</u>, 1990, 11-18, Mitchell, M., Lawler, M., Walraven, C., Hermos, R., To Screen or Not to Screen for Congenital Hyperplasia: Is that the Question?

<u>The Journal of Pediatrics</u>, 116: 78-83, Secor-McVoy, J., Lawler, M., Schmidt, M., Ebers, D., Hart, P., Pettit, D., Blitzer, M., Wolf, B., Partial Biotinidase Deficiency: Clinical and Biochemical Features

# Professional Affiliations

Northeastern Association of Forensic Scientists (NEAFS) since 2005

## Awards

Theobald Smith Education Grant for graduate studies

#### Curriculum Vitae

## Annie Khan (Dookhan)

### Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry. University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

## Experience:

2003 - present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- \*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- \*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- \*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- \*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- \*Maintenance and repairs of all analytical instruments.
- \*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- \* Responsible for the Quality Control/Quality Assurance program for the drug lab.
- \*Notary Public.
- \*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

#### 2001 - 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- \*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- \*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs).
- \*Trained and supervised new chemists and interns for the department.
- \*Routine QC testing of products for the FDA.
- \*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- \*Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- \*Complete testing of chemicals for Vendor Validation Project for the FDA.
- \*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

## Additional Training:

Dept. of Justice - Forensics Professionals. (numerous trainings)

GLP/GMP course with Massachusetts Biologic Laboratory.

OC/OA training according to FDA Codes and Regulations.

GC and GC/MS courses with Agilent Technologies and Restek.

HPLC course with Waters Cooperation.

FTIR course with Spectros.

TOC training with MBL and Sievers.

### Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)



CC #		
BOOK #	60	
PAGE #	<u> </u>	

DRUG RECEIPT PAGE #		(#	2		
DRUG RECEIPT	PAGE #  DESTRUCTION #				
District/Unit	Suiff		ID# 77872		
DEFENDANT'S NAME	ADDR	ESS	CITY	STATE	
			Dorhesty	MA	
				E ONLY	
DESCRIPTION OF ITEMS SUBMITTED	i de la constanta de la consta	GROSS QUANTITY	GROSS WEIGHT	ANALYSIS NUMBER	
C/S B, Crack Colina	_	10P16'S	6,28g		
	200000000000000000000000000000000000000				
o be completed by ECU personnel only lame and Rank of Submitting Officer	Juna -	Tyz	ID#	370	
eceived by	ZW)		Date	1-10_	

Date Analyzed: 02-09-11

City: Boston D.C.U. Police Dept.

Officer: P.O. Diana Lopez

10

Def:

Amount:

No. Cont:

À

Cont: pb

Date Rec'd: 11/19/2010

Gross Wt.:

6.28 2

Prelim: Collabe (F

No. Analyzed:

Net Weight: ()

Subst: SUB

Findings:

GE(7018)112

DRUG POWDER ANALYSIS FORM	29-11
SAMPLE # AGENCY	Boston DCM ANALYST MAC
No. of samples tested:	Evidence Wt. 6,28
PHYSICAL DESCRIPTION:	Gross Wt ( ): 2.0487
PHYSICAL DESCRIPTION:  10 pb with substance	Gross Wt ( ):
	Pkg. Wt:
1 feste V	011Aus 2334 2-5- 20p=19.2998 10g=18,0000g
	5y = 5,0000g
PRELIMINARY TESTS	
Cobalt Thiocyanate	Gold Chloride
Marquis	TLTA O TY
Froehde's	OTHER TESTS
Mecke's	
DDEI (MINIADY TEST DESI II TS	GC/MS CONSIDMATORY TEST

RESULTS\_\_\_

MS OPERÁTOR \_

RESULTS\_\_\_\_\_

DATE \_\_\_\_\_

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Operator : ASD

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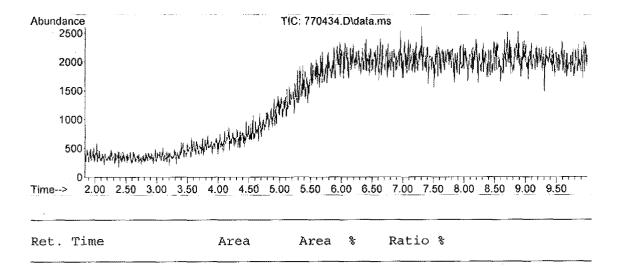
Sample Name : BLANK

Submitted by

Vial Number : 1 AcquisitionMeth: DRUGS.M

Integrator : RTE

ASD 2-11



## Area Percent / Library Search Report

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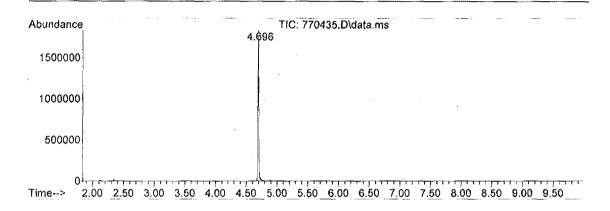
Operator : ASD

Date Acquired : 8 Feb 2011 15:29

Sample Name : COCAINE STD

Submitted by

Vial Number : 5 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
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Operator : ASD

Date Acquired : 8 Feb 2011 15:29

Sample Name : COCAINE STD

Submitted by

Vial Number : 5
AcquisitionMeth: DRUGS.M
Integrator : RTE

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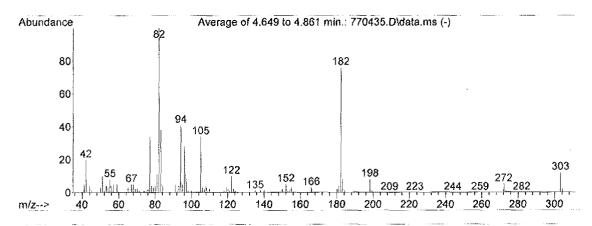
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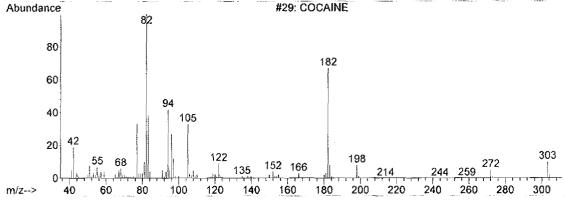
C:\Database\PMW TOX2.L

PK# RT Library/ID CAS# Qual

1 4.70 C:\Database\SLI.L

COCAINE 000050-36-2 99





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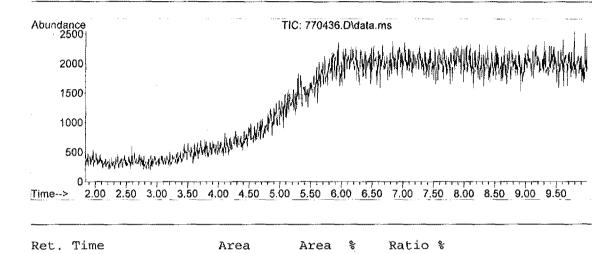
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Date Acquired : 8 Feb 2011 15:41

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AcquisitionMeth: DRUGS.M

Integrator : RTE



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Operator : ASD

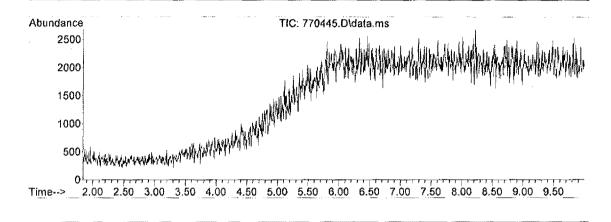
Date Acquired : 8 Feb 2011 17:35

Sample Name : BLANK Submitted by : MGL Vial Number

AcquisitionMeth: DRUGS.M

: 1

Integrator : RTE



Ret. Time

Area

Area %

Ratio %

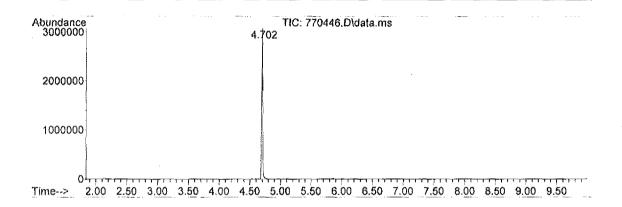
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Operator : ASD

Date Acquired : 8 Feb 2011 17:47

Sample Name : MGL Submitted by : MGL

Vial Number : 46
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
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Date Acquired 8 Feb 2011 17:47

Sample Name Submitted by MGL

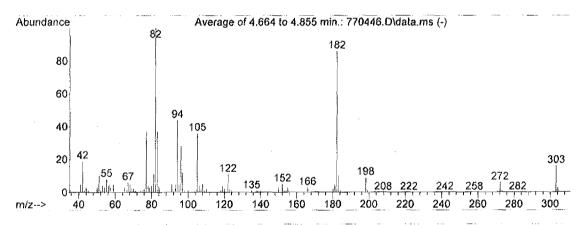
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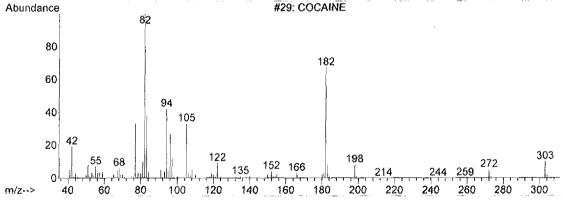
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Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW\_TOX2.L

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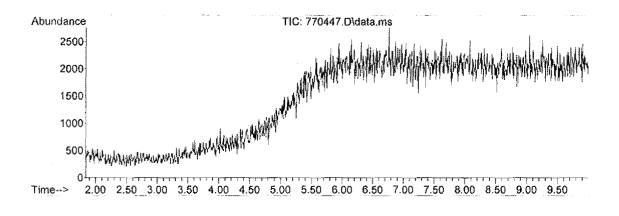


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Sample Name : BLANK
Submitted by : MGL
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time

Area

Area %

Ratio %

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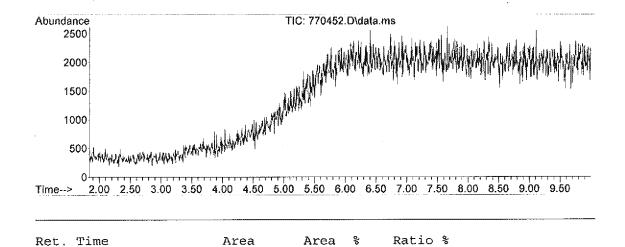
Operator : ASD

Date Acquired : 8 Feb 2011 19:03

Sample Name : BLANK

Submitted by

Vial Number : 2 AcquisitionMeth: DRUGS.M Integrator : RTE



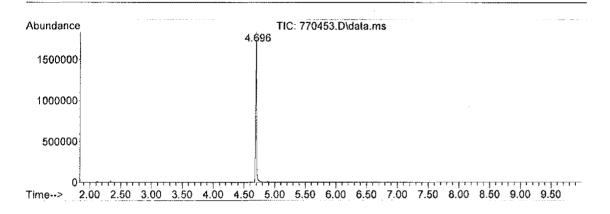
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Operator : ASD Date Acquired : 8 Feb 2011 19:16

: COCAINE STD Sample Name

Submitted by

Vial Number 5 AcquisitionMeth: DRUGS.M : RTE Integrator



Ret. Time	Area	Area %	Ratio %
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File Name : C:\msdchem\1\System7\02\_08\_11\770453.D

Operator : ASD

Date Acquired 8 Feb 2011 19:16

Sample Name COCAINE STD

Submitted by

RT

PK#

Vial Number 5 AcquisitionMeth: DRUGS.M Integrator : RTE

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Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

CAS# Qual

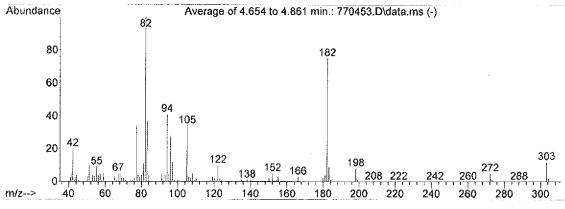
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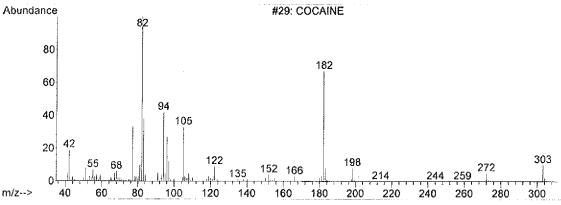
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Library/ID

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99





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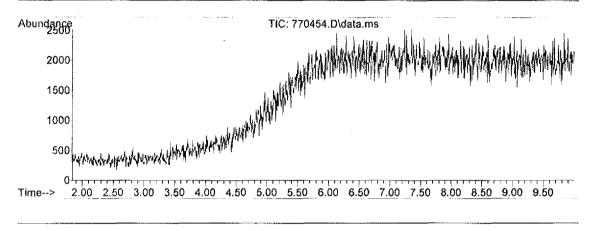
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Sample Name : BLANK

Submitted by

Vial Number : 2 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time

Area

Area S

Ratio %

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No further data.